

Postgraduate research topic opportunity

Mechatronics and Robotics

- Neural Networks controlled robot: Control of an autonomous vehicle by implementing similar integration of neural networks as performed by humans (i.e. robot learns from it's mistakes).
- Insect Mimicked robot: Research and design of an insect-type robot, which has characteristics of an insect. E.g. cockroach – it can continue moving if it lost a leg, or it can manipulate its body to squeeze into tight places.
- Household assistance robot: Research and design of a robot that will solve a problem or assist in an household environment
- Soft robotics:
- Haptic feedback and EMG control: To manipulate a robotic prosthetic hand that has been developed at UKZN.

The successful applicant will be able to apply for the college scholarship, should they not have received any other scholarship. The following requirements are needed:

- Performance of your final year project must be above the norm.
- You need to be self-motivated, efficient and meet the required deadlines.
- There are certain expectations required from you to allow you to guarantee the completion of your degree. Further details will be sent to you regarding this.

If you are interested in applying, you are required to submit:

- Your CV and academic record
- A description of your final year project and your responsibilities
- Who was your final year project supervisor?

All submissions or further details about the research topic can be sent to Professor Riaan Stopforth at Stopforth@ukzn.ac.za.